



UNITED STATES DEPARTMENT OF COMMERCE  
National Technical Information Service  
5285 Port Royal Road  
Springfield, Virginia 22161

Date 6 August 1981

NTIS Control # \_\_\_\_\_

TO: Defense Technical Information  
Center - DTIC  
Cameron Station  
Alexandria, Virginia 22314

FROM: NTIS, Input Branch  
5285 Port Royal Road  
Springfield, Virginia 22161

Report # DOD-DF-81-009

ADA # ADA102565

Title: Total Structure Verifier System

Subject report is ☐ Standard Process ☐ STG report. STG - Special  
Technology Group. ☒ Computer Product ☐ Follow up date \_\_\_\_\_

☐ The report will be accessioned by DDC. The form noting the ADA number  
is returned.

☐ The report has been assigned the ADA number noted above and is returned  
to NTIS for processing.

☐ DDC will not process the report. It is returned to NTIS

Mag Tape Price 360.00  
PC & MF Price \_\_\_\_\_

Source DODA field 3

Stock Quantity \_\_\_\_\_

Source Share \_\_\_\_\_

Comments:

field 4 - CP - T05  
field 8 - K. 80-22  
field 18-19 - DOD-DF-81-009

Dottie Adams

Signature (for billing)

Copy when completed to  
Finance Branch

DOD Report Action Request  
(Replaces NTIS-164 5-72)

Please return to NTIS - Information Services Branch, Room 301, Yorktown Building.  
Attention: Dottie Adams

81 8 07 074

AD A102565

## FEDERAL INFORMATION PROCESSING STANDARD SOFTWARE SUMMARY

01. Summary date Yr. Mo. Day 8 10 4 1 4			02. Summary prepared by (Name and Phone) Maj. B. J. Dugan (703)437-2538			03. Summary action New Replacement Deletion <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Previous Internal Software ID		
04. Software date Yr. Mo. Day 8 10 1 0 3 1			05. Software title Total Structure Verifier System (TSVS)					
06. Short title								
08. Software type <input type="checkbox"/> Automated Data System <input checked="" type="checkbox"/> Computer Program <input type="checkbox"/> Subroutine/Module			09. Processing mode <input type="checkbox"/> Interactive <input checked="" type="checkbox"/> Batch <input type="checkbox"/> Combination			10. Application area General <input checked="" type="checkbox"/> Computer Systems Support/Utility <input type="checkbox"/> Scientific/Engineering <input type="checkbox"/> Bibliographic/Textual Management/ Business <input type="checkbox"/> Process Control <input type="checkbox"/> Other Specific Total DBMS Utility		
11. Submitting organization and address Defense Communications Engineering Center 1860 Wiehle Avenue Reston, VA 22090						12. Technical contact(s) and phone Maj. B. J. Dugan (703)437-2538 AUTOVON 364-2538		
13. Narrative The Total Structure Verifier System (TSVS) is a utility which checks TOTAL file internal system fields. TOTAL files have pointer fields matching records within and between files. It is the purpose of the TSVS to check mode with a minimum of user preparation. The TSVS is designed to run in batch mode with a minimum of user preparation. The TSVS will report errors it finds by printing each record in error with a description of the error. The TSVS can find only those errors which are in conflict with the TOTAL file linkage rules. Thus, for example, the TSVS can find an error when a free space record points to an active record, but it cannot find an error when a data field has an incorrect value. In general, the TSVS will find errors of structure, when the TOTAL nucleus routines, while processing through application programs, improperly access records. The TSVS validates the integrity of the individual files without using the data base management system itself. The User's Manual is contained in the first file of the magnetic tape.								
14. Keywords TOTAL; DATA BASE; DBMS								
15. Computer manuf'r and model NASC AS/5-3			16. Computer operating system SVS,MVS			17. Programing language(s) PL/1, ALC		18. Number of source program statements 1500
19. Computer memory requirements 100K			20. Tape drives 0			21. Disk/Drum units 1		22. Terminals 0
23. Other operational requirements Total 6.3 or Total 8.0 Data Bases								
24. Software availability Available <input checked="" type="checkbox"/> Limited <input type="checkbox"/> In-house only <input type="checkbox"/> DDO-DF-009 DOT/DF-81/005 \$360.00 T05 NAC Software Statement #1						25. Documentation availability Available <input checked="" type="checkbox"/> on tape <input type="checkbox"/> Inadequate <input type="checkbox"/> In-house only <input type="checkbox"/> DTIC FILE COPY		
26. FOR SUBMITTING ORGANIZATION USE DTIC FILE COPY 41 1511 AUG 17 1981								

# COMPUTER MAGNETIC TAPE FILE PROPERTIES

01. Completion Date Year Month Day 8 1 0 6 2 3			02. Form Prepared By (Name and Phone) <b>MARK F. AMELL (703) 437-2552</b>			03. Reel ID Number (Property Control No.) <b>U90461</b>		
04. Recording Date Year Month Day 8 1 0 6 2 3			05. File Identifier or Descriptive Title <b>R832.TSVS.USER</b>			06. Short Title (External Label Name) <b>R832.TSVS.USER</b>		
07. Source Unavailable Year Month Day 			08. Documentation Yes No Available <input checked="" type="checkbox"/> <input type="checkbox"/> (Enter Citation) <b>FIRST FILE ON TAPE</b>			09. File Position on Reel <b>1 of 9</b>		
10. To Be Returned Yes No To Other Than The Sender <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			11. Submitting Organization & Address <b>OCEC/R832 1860 WIEHLE AVE. RESTON, Va. 22090</b>			12. Receiving Organization & Address <b>US DEPARTMENT OF COMMERCE NATIONAL TECHNICAL INFO SERVICE SPRINGFIELD, Va. 22161 ATTN: WALTER FINCH</b>		
13. Due Back Date Year Month Day 8 1 0 7 3 1			14. Technical Contact(s) & Phone Number(s) <b>2nd Lt MARK F. AMELL (703) 437-2552</b>					

## RECORDING SYSTEM CHARACTERISTICS

EQUIPMENT MANUFACTURER AND MODEL	15. Processing Unit <b>ITEL AS/5-3</b>	17. No. of Tracks 7 9 Other			18. Parity Odd Even		19. Density (BPI) <b>1600</b>
	16. Tape Subsystem <b>IBM 3400-5</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
RECORDING SOFTWARE	20. Operating System, Release & Version <b>MVS REL 3.8</b>		22. Internal File Identifier				
	21. Utility Program or Data Base Language <b>IEBGENER</b>						
23. Characters Set (Graphics) <input type="checkbox"/> ASCII <input type="checkbox"/> BCD <input type="checkbox"/> Other (Specify) <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> FIELDATA <input type="checkbox"/> Non-Print Codes			24. Recorded Label (Internal Label) <input type="checkbox"/> Header <input type="checkbox"/> Trailer <input type="checkbox"/> ANSI X 3.27 Standard <input type="checkbox"/> FIPS Standard <input checked="" type="checkbox"/> None				

## FILE CHARACTERISTICS

NUMBER OF RECORDS	25. Physical <b>63</b>	27. Record Type <input checked="" type="checkbox"/> Fixed Length <input type="checkbox"/> Other Than Fixed	28. Records/Block (Blocking Factor) <b>39</b>	TYPE OF FILE ORGANIZATION (Check One Box) <input type="checkbox"/> One File One Reel <input type="checkbox"/> One File Multiple Reels <input checked="" type="checkbox"/> Multiple Files One Reel <input type="checkbox"/> Multiple Files Multiple Reels
	26. Logical <b>2457</b>			
RECORD LENGTH	30. Physical <input type="checkbox"/> Bytes <input checked="" type="checkbox"/> Chars. 3120 <input type="checkbox"/> Words ( Bits/Word)			
	31. Logical <input type="checkbox"/> Bytes <input checked="" type="checkbox"/> Chars. 80 <input type="checkbox"/> Words ( Bits/Word)			

## SUPPLEMENTAL INFORMATION

32. Use/Handling Constraints (Specify if Yes) Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	
<p><i>Source tape is in EBCDIC character set. Tapes can be prepared in most standard 7 or 9 track recording modes for 1/2 inch tape. Identify recording mode desired by specifying character set, track, density and parity. Call NTIS Computer Products, if you have any questions.</i></p>	

**DTIC  
ELECT**

AUG 7 1981

///JOB CARD

```

///STEP1 EXEC PGM=IEBFIPCH,REGION=80K
///SYSPRINT DD SYSOUT=A
///SYSUT1 DD DSN=R032.TSVS.USER,UNIT=TAPE9,DISP=OLD,
/// DCB=(RECFM=FBA,LRECL=80,BLKSIZE=3120),
/// VOL=SER=000003,LABEL=(1,NL)
///SYST2 DD SYSCUT=A,DCB=BLKSIZE=133
///SYSIN DD *
PRINT PREFORM=A
/*

```

NOTES:

1. USER/INSTALLATION GUIDES CCNTAIN UPPER/LOWER CASE CHARACTERS.
2. TAPE FILE #9 CCNTAINS TOTAL8 SOURCE CODE CEANGES.  
(ORIGINAL IS FOR TOTAL 6.3)  
DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
3. REFERENCE PAGE 7 OF INSTALLATION GUIDE: ADD 'LABEL=(,NL)'  
TO TAPE DD STATEMENT.

TOTAL NUMBER OF LINES 0000031.

APPROVED \_\_\_\_\_  
 NAME GRAB1 ✓  
 DATE 11/1/71  
 UNIT/PROJECT  
 \$ 360.00  
 NTIS  
 A 21

DATE

8/5/81

TO: Input Branch

FROM: Computer Products Group M. Henson  
Init.RE: <sup>DOD</sup>  
~~DOT~~/DF-81/009  
~~005~~. Announce in GRA&IPriority action required ☒ Yes ☐ NOAttached

- ☒ Form NTIS ~~221~~ 185
- ☒ Form 277
- ☒ NTIS 79 completed as required
- ☐ RDP
- ☐ Consigned Inventory Acquisition Form  
(Interagency agreement number and split)

Process for

- |        |  |
|--------|--|
| K File | <input type="checkbox"/> Documentation       |
|        | <input type="checkbox"/> Mag Tape            |
| H File | <input type="checkbox"/> Documentation       |
|        | <input checked="" type="checkbox"/> Mag Tape |

Action

- ☐ Loan Document Form attached
- ☐ Defense sponsored. Acquire ADA number
- ☐ Highlight document. Blue slip attached
- ☐ Order Pending. Return immediately after copying  
necessary pages
- ☐ Supersedes \_\_\_\_\_

Remarks:

Note: FORM REQUIRED FOR EACH ITEM

PACKAGE RELATED ITEMS AND PAPERS